

inadvertent and was not meant to be an amendment. The Applicants have corrected the noted bracketing/underlining issues and have resubmitted the amendment with this paper. The Applicants note that this introduces no new matter as the amendments correct spelling errors. The Examiner further objected to claim two in that the spelling of "atom" in line 13 was incorrect. This also is corrected by this amendment.

Rejection under 35 U.S.C. § 112

The Examiner rejected claim 2 as indefinite and confusing for the (b) component of the Markush group and further questioning if it were supported by the paragraph bridging pages 6 and 7 of the specification. The Applicants note that one of ordinary skill in the art could determine the components of the Markush group from the claim itself and therefore the claim is not indefinite. That is, the second component is a mixture of ZDDP containing a primary alkyl group having 1 to 18 carbon atoms and ZDDP containing secondary alkyl groups having 3 to 18 carbon atoms.

This Markush group is also supported in the paragraph noted by the Examiner on pages 6 and 7. That is, a mixture of ZDDP with primary alkyl groups and ZDDP with secondary alkyl groups is clearly encompassed by the final words of the paragraph - "and a mixture thereof". Thus this paragraph includes primary alkyl ZDDP, secondary alkyl ZDDP "and a mixture thereof." - the final portion containing the ZDDP of claim 2. Applicants respectfully request that the Examiner review and remove this 112 rejection in light of these remarks.

However, Applicants also recognize that the wording of the paragraph bridging pages could be made more clear. As such, the Applicants have amended the specification rewriting a section of that paragraph. This adds no new matter as each combination was previously disclosed in the paragraph itself, and in claim 1 as originally filed.

The Examiner also rejected claim 1 as further indefinite because the succinimide containing boron was stated to have a range of 0.05 to 0.06% by weight. The Applicants believe that the Examiner was referring to Claim 2 and the remarks herein are directed with that assumption. Applicants note that the Examiner is correct that this is a typographical error. The correct range (and as amended herein) is from 0.005 to 0.06 % by weight. This amendment adds no new matter as the correct range is clearly shown on page 9, line 8. That this is the correctly claimed range is further buttressed by the stair step range found in the following line.

The Examiner further question the 0.05 to 0.06 range in claim 2 by noting that the example in tables 2 and 3 are at 0.016 wt%, which is not inside the 0.05 to 0.06 range. Applicants note that with the amendment to the correct range, the examples fall within the claimed ranges. Applicants respectfully request that the Examiner review and remove this § 112 rejection in light of these remarks.

None of these amendments would trigger any Festo restrictions on Doctrine of Equivalents should the claims be allowed. These amendments are made only to correct typographical errors and do not go to the patentability of the claims in anyway.

Rejection under 35 U.S.C. §103(a)

The Examiner rejected claims 1 and 3-5 as obvious in light of Igarashi (USP 5,281,347) in view of Papay (USP 4,178,256), Umemura (USP 4,692,256) and White (USP 4,330,420). Applicants must respectfully disagree. The Examiner has the burden of proving that a *prima facie* case for obviousness exists. MPEP 2142. Three criteria define the *prima facie* case for obviousness:

1. The Examiner must demonstrate that there is some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings.
2. The Examiner must demonstrate that combining these teaches will result in a reasonable expectation of success.
3. The Examiner must show that all limitations are found or suggested in the prior art.

Id. The Examiner has clearly not provided any facts to establish third element. The Applicants make no comment on the Examiner's success at the first two elements as the missing third element is sufficient to defeat the *prima facie* case.

The Examiner has not shown that any of the following limitations in the claims of the present invention are "found or suggested" in any of the prior art cited. Specifically, the Examiner has not shown that the prior art teaches that:

1. The ZDDP be contain only primary alkyl groups or the ZDDP be a mixture of ZDDP with only primary alkyl groups and ZDDP with only secondary alkyl groups.
2. The carbon groups on the ZDDP be of 1 to 18 carbons for the primary alkyl groups and 3 to 18 carbon atoms for the secondary alkyl groups (later reduced to 3 to 12 carbon atoms for both primary and secondary alkyl groups in claim 4).
3. The alkyl salicylate component comprises 0 - 50% by weight, the balance being calcium.
4. The TBN of the of the lubricant being between 3 to 10.

Neither the Examiner nor the Examiner's cited prior art addresses the first two of the above limitations in any manner.

The Examiner attempts to address the third of the above listed limitations by saying, "[i]t is the examiner's position that the 0-50% by weight of magnesium alkylsalicylate reads on the compound being optional and is not required." The Applicants must humbly note that this limitation is stated in each independent claim and therefore must be treated as a valid

limitation. The Applicants request that the Examiner detail the section of the MPEP that allows the Examiner to dismiss an Applicant's claim limitation as "optional and not required" and therefore not necessary to account for in the Examiner's rejection.

Likewise, the Examiner states, without attribution, that the lubricant as defined by the Molybdenum, ZDDP and salicylate ranges would inherently have a TBN of between 3 and 10. The Applicant humbly submits that the Examiner is in error on this point. One of ordinary skill in the art knows that the ZDDP and MoDTC add little if anything to the TBN of the lubricant. Further, one of ordinary skill in the art knows that salicylate detergents range from no overbasing to extremely strong overbasing. As such, using the same amount of a not-overbased detergent would produce a far different TBN than using the same weight percentage of a heavily overbased detergent. Applicants respectfully submits that the final TBN of the lubricant is therefore not defined by the proportions of the components required and therefore the Examiner's contention is in error.

As the Examiner has not provided any reference that contains any of these four limitations found in the Applicant's claims, the Examiner has not met the third element required to establish the *prima facie* case for obviousness in MPEP 2142. The Applicants note that they believe that the Examiner has not met the other two elements as well, but the failure to satisfy the third element is so profound as to make analysis of the other two elements unnecessary at this time. However, Applicants reserve the right to do so if necessary in the future. The Applicants request that the Examiner remove this rejection in light of these remarks.

Rejection as Obvious-Type Double Patenting

Although presented earlier in the Examiner's Office Action, for ease of argument, the Applicants have considered this rejection after the general 103 rejection from above. The Examiner rejected claims 1 and 4-5 as provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 1, 3-6 and 8 of co-pending application 08/987,404. The Applicants must humbly disagree. This application does not contain any of the four above noted limitations, nor suggest them in any way. Therefore, again, the Examiner has not established the third required element of the *prima facie* case for obviousness.

Moreover, the examiner has not show that there is any suggestion or motivation to use the technology of the '404 application in the present case. That is, the '404 application is directed to ester based, PAO and highly hydrotreated (Group II and Group III) base stocks, completely different from Group I basestocks allowed by the present Application. Therefore the Examiner has failed to meet the first required element of the *prima facie* case for obviousness.

Even if the Examiner asserts that the teachings toward synthetic base stocks could be readily applied to mineral oils, the Examiner has still failed to satisfy the analysis required by MPEP 2144.08. That is, at best, the '404 applications is a single piece of art describing a genus. If the Examiner's analysis were to be accepted, the present invention would be a specific species of that genus. As such, the MPEP requires a specific analysis and set of findings to show that the present application is obvious in light of that single reference. The Examiner has not provided that analysis, and even if she were to do so, would not come to a finding of obviousness under that required analysis.

The present application is not obvious-type double patenting in light of the '404 application in the that the Examiner has not met the required elements to establish the *prima facie* case, nor followed the proper analysis as required by MPEP 2144.08. Applicants respectfully request that the Examiner withdraw her rejection based upon obvious-type double patenting.

Rejection under 35 U.S.C § 102

The Examiner rejected claims 1 and 3-5 as being anticipated by Inoue (USP 5,744,430). Inoue teaches a lubricant concentration including calcium salicylates (0.5-1.2%), ZDTP (0.02 to 0.15% by phosphorous) and MoDTC (0.02 to .15% as Mo). The Examiner then claims that "[I]t has been held that a claim is anticipated if the claim ranges overlap the prior art ranges." Further, the Examiner notes that the Application's claims are of the comprising form and therefore open ended. The Applicants must respectfully disagree with the Examiner's rejection for two reasons.

First, Inoue does not include every claim limitation found in the present claims. The MPEP teaches that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP 2131 (quoting Verdegaal Bros v. Union Oil Co. of California, 814 F.2d 628 (from the 103 section), 631 (Fed Cir. 1987)). As Inoue does not include any of the 4 above listed limitations, it does not anticipate the claims of the present invention.

Second, the Examiner's contention that the "comprising" language (as open ended) would anticipate any specific combination of features does not follow the MPEP. Specifically, MPEP §2131.02 teaches that a broad genus revealed in prior art does not anticipate an inventive species within that genus. While providing several examples, one is particularly on

point for this case. "Claims to a process for making aramid fibers using a 98% solution of sulfuric acid were not anticipated by a reference which disclosed using a sulfuric acid solution, but which did not disclose using a 98% concentrated sulfuric acid solution." MPEP § 2131.02 (quoting Akzo N.V. v. International Trade Comm'n, 808 F.2d 1471 (Fed Cir. 1986)).

Inoue does not anticipate the present invention because while he broadly discloses a genus of lubricant, he does not reveal the species of the present invention. Inoue including calcium salicylates, ZDTP and MoDTC. That is, even though Inoue discloses ZDTP, he fails to disclose the restrictions concerning the alkyl groups on the ZDDP (whether they are primary or secondary, nor the number of carbon atoms in each group).

Even though Inoue discloses using a calcium salicylate, he does not disclose using a specific mix of calcium and magnesium salicylates. Even though Inoue discloses using MoDTC, he does not disclose the limitation of the alkyl groups carbon atom limitations found in the present invention's claims. In light of MPEP §2131.02, Inoue does not anticipate the present invention.

The Examiner's §102 rejections are in error because the cited references do not show every limitation found in the present claims, and because the prior art only teaches a broad genus of lubricants, but not the particular species of the present invention. In light of these remarks, Applicants respectfully request the Examiner to withdraw her §102 rejection.

The Examiner has offered 4 separate lines of rejections for the present invention.